



FICHA DE UNIDADE CURRICULAR

Unidade Curricular

201821000 - PROJETO DE INTERAÇÃO I

Tipo

Obrigatória

Ano lectivo

2022/23

Curso

Mestrado Design de
Interação

Ciclo de estudos

2º

Créditos

10.00 ECTS

Idiomas

Português ,Inglês

Periodicidade

semestral

Pré requisitos

Ano Curricular / Semestre

1º / 1º

Área Disciplinar

Design

Horas de contacto (semanais)

Teóricas	Práticas	Teórico práticas	Laboratoriais	Seminários	Tutoriais	Outras	Total
0.00	0.00	9.00	0.00	0.00	0.00	0.00	9.00

Total Horas da UC (Semestrais)

Total Horas de Contacto

126.00

Horas totais de Trabalho

250.00

Docente responsável (nome / carga lectiva semanal)

Marco António Neves da Silva

Outros Docentes (nome / carga lectiva semanal)

Marco António Neves da Silva	4.50 horas
Francisco Rebelo	1.00 horas
Paulo Noriega	1.00 horas
Victor Almeida	1.00 horas
Sónia Rafael	1.50 horas

Objetivos de aprendizagem (conhecimentos, aptidões e competências a desenvolver pelos estudantes)

Fomentar a contextualização da área do Design de Interação e do seu âmbito de ação, estimulando o pensamento criativo.

Capacitar o desenvolvimento e realização de projeto em design de interação, de um modo informado e crítico.

Permitir a aquisição de conhecimentos sobre os conceitos e as referências desta área, dominando os elementos e os princípios, sua importância e finalidade.

A unidade curricular centra a atenção na metodologia do projeto de artefactos e sistemas interativos, desvinculados de imposição tecnológica, para que esse conhecimento auxilie os alunos na escolha de área(s) onde pretendam aperfeiçoar competências mais específicas e que serão prosseguidas em Projeto de Interação II e III.

Conteúdos Programáticos / Programa

Contextualização do Design de Interação e de áreas adjacentes, observando a relação com a tecnologia, com a presença humana e a definição de comportamentos.

A compreensão do Design de Interação passará pelos seus princípios, dimensões e elementos.

Será abordado o processo em Design de Interação e suas principais fases, através de métodos de recolha e pesquisa (design research e user research); definição de situações e requisitos para desenvolvimento de projeto; métodos de conceção e avaliação.

Nas diversas fases invocam-se os meios necessários, com referência aos tipos de interação, bem como as ferramentas de registo gráfico, de simulação interativa e de comunicação audiovisual.

Demonstração da coerência dos conteúdos programáticos com os objectivos de aprendizagem da unidade curricular

Os conteúdos programáticos permitem conhecer, desenvolver e adaptar processos para produção de interação.

O pensamento e a criação crítica, acompanhada da diversidade de etapas pretende aproximar os conhecimentos e competências a adquirir, de noções alargadas de interação, bem como das suas vantagens junto dos potenciais utilizadores.

O conhecimento dos princípios e a gestão dos elementos a incorporar nos trabalhos a desenvolver, em simultâneo com a experimentação de diferentes media, permitirá entender a prática ampla do design de interação.

Metodologias de ensino (avaliação incluída)

A UC assentará na elaboração de projetos, compreendendo três fases enquanto elementos de avaliação. Os propósitos e procedimentos de cada projeto individual serão distintos, mas terão como fatores comuns a atribuição da capacidade interativa e a preocupação com os utilizadores.

Um conjunto alargado de docentes, com conhecimentos e experiências diversificados, irá participar com contribuições próprias a cada momento, para que cada projeto possa refletir as preocupações da área específica para o qual é proposto.

Será atribuída atenção à análise crítica das matérias, através de exposição partilhada e debate em torno de casos de estudo.

A exposição de conteúdos textuais, esquemáticos, visuais e audiovisuais antecederá o

desenvolvimento de projectos de carácter prático, a que se seguirá um acompanhamento individual e em grupos de trabalho.

Todos os momentos de acompanhamento dos projectos constituem situações de reflexão e aprendizagem. Estes momentos, que constituem avaliação contínua, são determinados por critérios como a criatividade, inovação e demonstração de conhecimentos, aos quais se juntam a argumentação e apresentação.

São também fatores de ponderação a assiduidade e a participação.

É obrigatória a presença de todos os alunos em exame, salvaguardando-se o disposto no Regulamento de Avaliação do Aproveitamento dos Estudantes.

Demonstração da coerência das metodologias de ensino com os objetivos de aprendizagem da unidade curricular

É importante definir e aplicar processos de trabalho individual e em grupos, que considere situações identificadas ou especulativas, numa articulação com opções de produção interativa.

Assim, o estímulo ao pensamento e criação crítica, a análise de processos já usados, o contacto com os meios e ferramentas de suporte, beneficiam o desenvolvimento de projetos e permitem acumular experiência.

Bibliografia Principal

- Benyon, D. (2010). *Designing Interactive Systems: A Comprehensive Guide to HCI and Interaction Design*. Pearson, Edinburgh.
- Bolter, J & Gromala, D (2003). 'Text Rain: The Digital Experience', in *Windows and Mirrors: Interaction Design, Digital Art, and the Myth of Transparency*. Cambridge MA: MIT Press.
- Buxton, B. (2007). *Sketching User Experiences: Getting the Design Right and the Right Design*, San Francisco: Morgan Kaufman.
- Cooper, A, Reimann, R & Cronin, D (2007). *About Face 3: The Essentials of Interaction Design*, Indianápolis: Wiley Publishing.
- Dourish, P., (2001). *Where the Action is: The Foundations of Embodied Interaction*. Cambridge, Massachussets, London, England: The MIT Press.
- Dubberly, H., Haque, U., Pangaro, P. (2009). 'What is Interaction? Are there Different Types?' in <http://www.dubberly.com/articles/what-is-interaction.html>
- Garrett, J. J., (2011). *The Elements of User Experience: User-Centered Design for the Web and Beyond*, New Riders, Berkeley
- Höök, K., & Löwgren, J. (2021). Characterizing interaction design by its ideals: A discipline in transition. *She Ji: The Journal of Design, Economics, and Innovation*, 7(1), 24-40.
- Moggridge, B (2007). *Designing Interactions*, Cambridge and London: The MIT Press.
- Moggridge, B. (2010) *Designing Media*, The MIT Press, Cambridge and London.
- Preece, J., Rogers, Y., & Sharp, H. (2002). *Interaction Design: Beyond Human-computer Interaction*. New York: John Wiley & Sons, Inc.
- Saffer, D (2007), *Designing for Interaction: Creating Smart Applications and Clever Devices*, 2nd edition, Berkeley, Califórnia: New Riders.
- Tidwell, J. (2011). *Designing Interfaces: Patterns for Effective Interaction Design (2nd Ed.)*. O'Reilly
- Wiberg, M. (2018). *The materiality of interaction: Notes on the materials of interaction design*. MIT

press.

Bibliografia Complementar

- Arvola, M. & Artman, H. (2007) Enactments in Interaction Design: How Designers Make Sketches Behave. *Artifact*, 1(2): 106-119.
- Battarbee, K., & Koskinen, I. (2005). Co-experience: User Experience as Interaction. *CoDesign*, 5-18
- Blevis, E. & Stolterman, E. (2008) The Confluence of Interaction Design & Design: From Disciplinary to Transdisciplinary Perspectives. *Proceedings of DRS2008, Design Research Society Biennial Conference, Sheffield, UK, 16-19 July, 344/1--12.*
- Bonsiepe, G (1999). *Interface: An Approach to Design*, Maastricht: Jan van Eyck Akademie.
- Buchanan, R. (1992). Wicked Problems in Design Thinking. *Design Issues* 8(2), 5-22.
- Colborne, G. (2017). *Simple and Usable Web, Mobile, and Interaction Design*. 2ed. Berkeley, CA: New Riders.
- Coughlan, P., Fulton Suri, J. & Canales, K. (2007). Prototypes as (Design) Tools for Behavioral and Organizational Change: A Design-Based Approach to Help Organizations Change Work Behaviors. *The Journal Of Applied Behavioral Science*, 43 (1), March 2007, 1-13.
- Forlizzi, J. e Ford, S. (2000). *The Building Blocks of Experience: An Early Framework for Interaction Designers*, DIS '00, Brooklyn, New York, USA.
- Forlizzi, J. e Battarbee, K. (2004). *Understanding Experience in Interactive Systems*. DIS2004, August 1-4, 2004, Cambridge, Massachusetts, USA.
- Goodwin, K. (2009). *Designing For The Digital Age: How to Create Human-Centered Products and Services*. Indianapolis, Indiana: Wiley Publishing, Inc.
- Grudin, J., (2007). A Moving Target: The Evolution of Human-computer Interaction. In Andrew Sears and Julie A. Jacko (Eds.). *Human-computer Interaction Handbook: Fundamentals, Evolving Technologies, and Emerging Applications*. (3rd edition). Taylor & Francis.
- Hallnäs, L & Redström, J (2006). *Interaction Design: Foundations, Experiments*, Borås: The Interactive Institute, The Swedish School of Textiles, University College of Borås.
- Heeter, C (2000). 'Interactivity in the Context of Designed Experiences', *Journal of Interactive Advertising*, 1(1). American Academy of Advertising, pp.4-15.
- Kolko, J. (2011). *Thoughts on Interaction Design*. Burlington: Morgan Kaufmann.
- Krishna, G. (2015). *The best Interface is no Interface: The Simple Path to Brilliant Technology*. USA: New Riders.
- Löwgren, J. & Reimer, B. (2013). The Computer is a Medium, Not a Tool: Collaborative Media Challenging Interaction Design. *Challenges*, 4, 86-102.
- Löwgren, J. e Stolterman, E. (2004). *Thoughtful Interaction Design: A Design Perspective on Information Technology*. MIT Press.
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- Sanders, E., Stappers, P. (2008). Co-creation and the New Landscapes of Design. *CoDesign International Journal of CoCreation in Design and the Arts* 4(1), 5-18.
- Shneiderman, B. e Plaisant, C., (2004). *Designing the User Interface: Strategies for Effective Human-computer Interaction*. 4a Ed., Boston: Pearson/Addison Wesley.





CURRICULAR UNIT FORM

Curricular Unit Name

201821000 - Interaction Projetc I

Type

Compulsory

Academic year

2022/23

Degree

Master Interaction Design

Cycle of studies

2

Unit credits

10.00 ECTS

Lecture language

Portuguese ,English

Periodicity

semester

Prerequisites

Year of study/ Semester

1 / 1

Scientific area

Design

Contact hours (weekly)

Tehoretical	Practical	Theoretical-practicals	Laboratory	Seminars	Tutorial	Other	Total
0.00	0.00	9.00	0.00	0.00	0.00	0.00	9.00

Total CU hours (semester)

Total Contact Hours

126.00

Total workload

250.00

Responsible teacher (name /weekly teaching load)

Marco António Neves da Silva

Other teaching staff (name /weekly teaching load)

Marco António Neves da Silva	4.50 horas
Francisco Rebelo	1.00 horas
Paulo Noriega	1.00 horas
Victor Almeida	1.00 horas
Sónia Rafael	1.50 horas

Learning objectives (knowledge, skills and competences to be developed by students)

Foster the contextualization of the Interaction Design area and its scope of action, stimulating creative thinking.

Enable development and accomplishment of interaction design projects, in an informed and critical way.

Allow acquisition of knowledge about the concepts and references in this area, mastering elements and principles, their importance and purpose.

The curricular unit focuses on design methodology for interactive artefacts and systems, unrelated to technological imposition, so that this knowledge helps students in choosing the area(s) where they intend to improve more specific skills and which will be pursued in Interaction Project II and III.

Syllabus

Contextualization of Interaction Design and adjacent areas, observing the relationship with technology, with human presence and the definition of behaviors.

Understanding of Interaction Design will be done through its principles, dimensions and elements.

The process in Interaction Design and its main phases will be addressed, through collection and research methods (design research and user research); definition of situations and requirements for project development; design and evaluation methods.

In the different phases, necessary means are invoked, with reference to types of interaction, as well as tools for graphic recording, interactive simulation and audiovisual communication.

Demonstration of the syllabus coherence with the curricular unit's learning objectives

The syllabus allows knowing, developing and adapting processes to produce interaction.

Critical thinking and creation, accompanied by the diversity of stages, aims to bring knowledge and skills to be acquired closer together with broader notions of interaction, as well as its advantages with potential users.

The knowledge of principles and management of elements to be incorporated in the work to be developed, simultaneously with experimentation of different media, will allow us to understand the wide practice of interaction design.

Teaching methodologies (including evaluation)

This curricular unit will be based on elaboration of projects, understanding three stages as assessment elements. The purposes and procedures of each individual project will be distinct, but will have as common factors attribution of interactive capacity and concern with users.

A broad set of teachers, with diverse knowledge and experience, will participate with their own contributions at each moment, so that each project can reflect concerns of specific area for which it is proposed.

Attention will be given to critical analysis of subjects, through shared exposure and discussion around case studies.

The exhibition of textual, schematic, visual and audiovisual content will precede development of projects of practical nature, followed by individual and group work.

All moments of project monitoring are situations of reflection and learning. These moments, which constitute continuous evaluation, are determined by criteria such as creativity, innovation and demonstration of knowledge, to which argumentation and presentation are added.

Attendance and participation are also factors of consideration.

The presence of all students in final exam is mandatory, safeguarding what is mentioned in the Student Achievement Assessment Regulation.

Demonstration of the coherence between the Teaching methodologies and the learning outcomes

It is important to define and apply individual and group work processes, which consider identified or speculative situations, in conjunction with interactive production options.

Thus, stimulus to critical thinking and creation, analysis of processes that have already been used, and contact with means and support tools, will benefit the development of projects and allow for the accumulation of experience.

Main Bibliography

- Benyon, D. (2010). *Designing Interactive Systems: A Comprehensive Guide to HCI and Interaction Design*. Pearson, Edinburgh.
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Additional Bibliography

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